

# Oil and Natural Gas : 2016 New Source Performance Standards (OOOOa)

Informational Meeting with Tribes  
November 19, 2018

# Overview

---

- ▶ Oil and Gas Industry
- ▶ Timeline of Actions
- ▶ 2016 New Source Performance Standards (NSPS)
- ▶ 2018 Proposed Amendments
- ▶ Resources

# Oil and Gas Industry

Oil and natural gas systems encompass wells, gas gathering and processing facilities, storage, and transmission and distribution pipelines



## Production & Processing

1. Drilling and Well Completion
2. Producing Wells
3. Gathering Lines
4. Gathering and Boosting Compressors
5. Gas Processing Plant



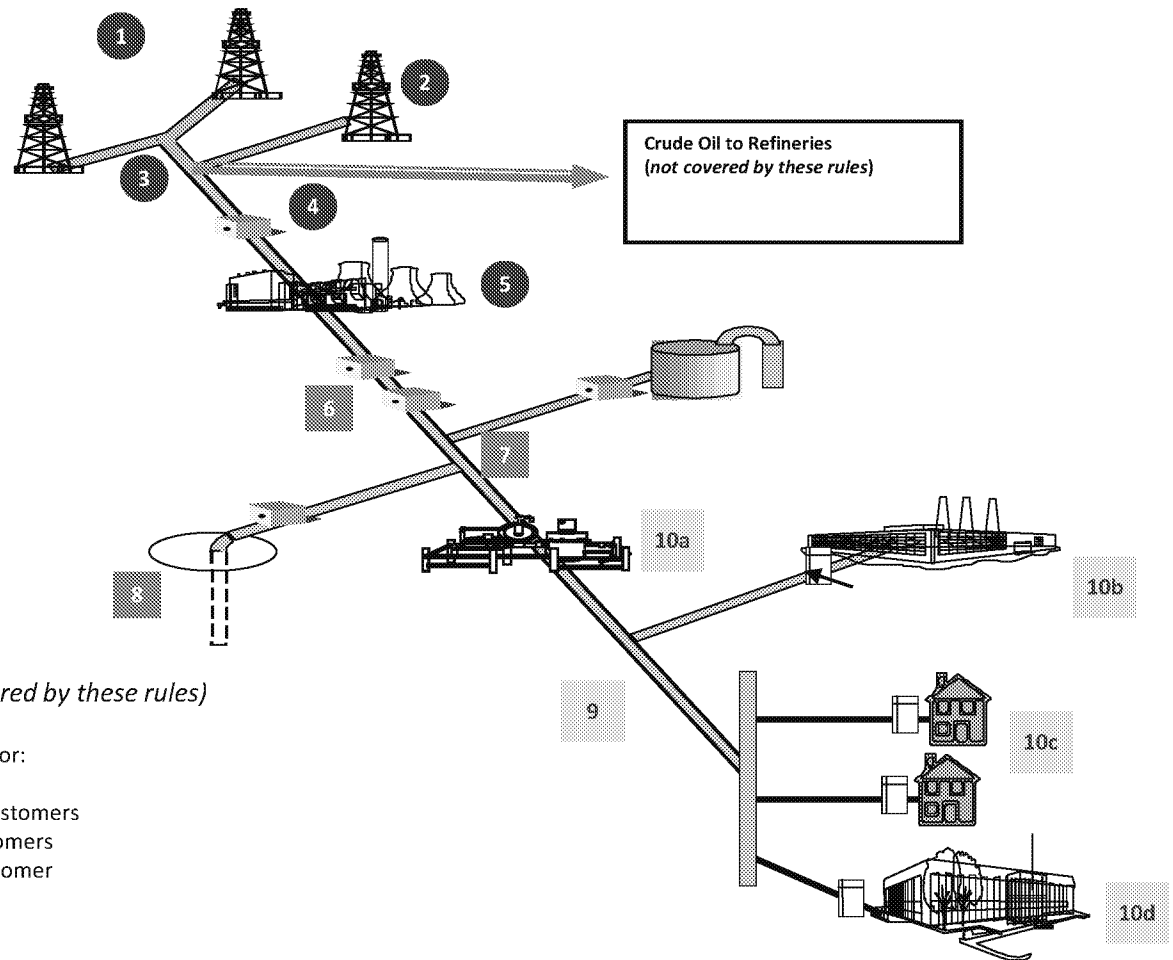
## Natural Gas Transmission & Storage

6. Transmission Compressor Stations
7. Transmission Pipeline
8. Underground Storage



## Distribution (not covered by these rules)

9. Distribution Mains
10. Regulators and Meters for:
  - a. City Gate
  - b. Large Volume Customers
  - c. Residential Customers
  - d. Commercial Customer



Source: Adapted from American Gas Association and EPA Natural Gas STAR Program

# OAQPS Rules: NSPS

---

- ▶ **September 2012:** EPA issued New Source Performance Standards (NSPS) for oil and gas industry, commonly referred to as NSPS OOOO
- ▶ **June 2016:** EPA issued additional NSPS for oil and gas industry, commonly referred to as NSPS OOOOa
  - ▶ **April 2017:** EPA granted reconsideration of fugitive emissions requirements
- ▶ **June 2017:** EPA announced reconsideration on two additional requirements:
  - ▶ Well site pneumatic pumps standards; and
  - ▶ Professional engineer certification requirements for the design capacity of closed vent systems
- ▶ **March 2018:** EPA amended two narrow provisions of 2016 NSPS to address two fugitive emissions requirements:
  - ▶ Requirement that leaking components be repaired during unplanned or emergency shutdowns
  - ▶ Monitoring survey requirements for well sites located on Alaskan North Slope

# OAQPS Rules: NSPS (cont.)

---

- ▶ **October 2018:** EPA proposed amendments and clarifications related to the specific reconsideration issues identified in 2017
  - ▶ Streamline implementation
  - ▶ Reduce duplicative EPA and state requirements
  - ▶ Significantly decrease unnecessary burdens on domestic energy producers
  - ▶ EPA will continue to consider broad policy issues in 2016 rule, including regulation of GHG in sector; issues will be addressed in separate proposal at a later date
- ▶ **November 14, 2018:** Public hearing was held in Denver
- ▶ Public comment period open until December 17, 2018
  - ▶ Docket ID: EPA-HQ-OAR-2017-0483

# 2016 New Source Performance Standards: Review

---

- ▶ Set emissions limits for methane and VOCs
  - ▶ Owners/operators meet limits using technologies that are cost-effective and readily available
  - ▶ Types of sources subject to the 2012 NSPS for VOCs did not have to install additional controls to reduce methane; the same controls reduce both pollutants
- ▶ Covered additional sources beyond the 2012 NSPS:
  - ▶ Hydraulically fractured oil wells
  - ▶ Pneumatic pumps at well sites and gas processing plants
  - ▶ Compressors and pneumatic controllers at transmission and storage facilities
  - ▶ Fugitive emissions monitoring and repair at well sites and compressor stations

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments

---

- ▶ On September 11, 2018, EPA announced a number of proposed amendments to the 2016 rule
  - ▶ Address a range of technical issues in response to administrative petitions
  - ▶ Clarify certain requirements in the rule
  - ▶ Address implementation issues that have been brought to the Administration's attention since the 2016 standards were issued
- ▶ EPA's regulatory impact analysis (RIA) estimates cost savings of up to \$75 million per year, or a total of \$484 million for the 2019-2025 period (3 percent discount rate)

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments

---

## Fugitive Emissions: Monitoring

- ▶ 2016 Rule
  - ▶ Well sites: semiannual
  - ▶ Compressor stations: quarterly
- ▶ 2018 Proposed Amendments
  - ▶ Well sites:
    - Non-low production well sites: annual
    - Low production well sites: biennial (once every other year)
    - Monitoring can stop once all major production and processing equipment is removed from a well site, resulting in a wellhead-only well site
  - ▶ Compressor stations: semiannual and annual (co-proposal)

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>



# 2018 Proposed Amendments (cont.)

---

## Fugitive Emissions: Repair

### ▶ 2016 Rule

- ▶ Repair all leaking components within 30 days of finding a leak
- ▶ Resurvey to verify repair within 30 days of completing repair

### ▶ 2018 Proposed Amendments

- ▶ Make first attempt at repair within 30 days of finding leak
- ▶ Complete repairs within 60 days of finding leak

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

---

## Fugitive Emissions: Alaska

### ▶ 2016 Rule

#### ▶ *Well sites* on the Alaska North Slope

- Initial monitoring:
  - Within 6 months of startup or by June 30, whichever is later (September – March startup)
  - Within 60 days of startup (April – August startup)
- Annual monitoring thereafter

### ▶ 2018 Proposed Amendments

- ▶ Expands well site requirements to *compressor stations* on Alaska North Slope

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

---

## Emerging Technologies

### ▶ 2016 Rule

- ▶ Provided details for owners/operations to apply for an alternative means of emission limitation (AMEL)
- ▶ Required 12 months of site-specific field data

### ▶ 2018 Proposed Amendments

- ▶ Streamlined application requirements
- ▶ Added allowance for modeling results to supplement field data
- ▶ Allows owners/operators to apply with technology vendors or trade associations

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

---

## Equivalent State/Tribal Programs

### ▶ 2016 Rule

- ▶ Same AMEL application process used for emerging technologies

### ▶ 2018 Proposed Amendments

- ▶ Would provide a separate application process for states and tribes to apply for alternative fugitive emissions standards
- ▶ Proposing alternative fugitive emissions standards for specific states, including Ohio and Pennsylvania, to streamline applications for existing state programs

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

---

## Pneumatic Pumps

### ▶ 2016 Rule

- ▶ Required 95% control of emissions at well sites
- ▶ Required a qualified PE to certify technical infeasibility of routing emissions to control at brownfield sites

### ▶ 2018 Proposed Amendments

- ▶ Would provide technical infeasibility assessment at all well sites
- ▶ Would provide option for in-house engineer to certify assessment

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

## Professional Engineer Certifications for Closed Vent Systems

- ▶ 2016 Rule
  - ▶ Required PE certification of closed vent systems
- ▶ 2018 Proposed Amendments
  - ▶ Would provide option for in-house engineers (appropriate expertise) to evaluate designs of closed vent systems and certify design/capacity sufficiency

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# 2018 Proposed Amendments (cont.)

---

## Other Proposed Amendments

- ▶ Would clarify requirements or improve implementation:
  - ▶ Definition of “capital expenditure” as it relates to equipment leaks at onshore natural gas processing plants
  - ▶ Definitions related to well completions
  - ▶ Calculation of “maximum average daily throughput” for storage vessels

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>

# Oil & Gas Rule: Resources

---

## ► Contacts

### ► NSPS:

- Karen Marsh, marsh.karen@epa.gov
- Amy Hambrick, hambrick.amy@epa.gov

## ► Resources

- Small entity compliance guide for NSPS OOOOa (as of August 2016):  
<https://www.epa.gov/sites/production/files/2016-08/documents/2016-compliance-guide-oil-natural-gas-emissions.pdf>

<https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>